

05-90  
0606



OIPE

#5

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/087,286

DATE: 06/05/2002  
TIME: 10:51:44

Input Set : A:\PTO.PG.txt  
Output Set: N:\CRF3\06052002\J087286.raw

p.6

3 <110> APPLICANT: ARIAD Gene Therapeutics, Inc.  
5 <120> TITLE OF INVENTION: Expression of Proteins for Treating Asthma via Ligand Mediated Activation

6 of Their Encoding Genes  
8 <130> FILE REFERENCE: 356A PCT/USC1  
10 <140> CURRENT APPLICATION NUMBER: 10/087,286  
11 <141> CURRENT FILING DATE: 2002-03-02  
13 <160> NUMBER OF SEQ ID NOS: 79  
15 <170> SOFTWARE: PatentIn version 3.0  
17 <210> SEQ ID NO: 1  
18 <211> LENGTH: 11  
19 <212> TYPE: DNA

C--> 20 <213> ORGANISM: Artificial  
22 <220> FEATURE:  
23 <223> OTHER INFORMATION: Metallothionene AP1 Site  
25 <220> FEATURE:  
26 <221> NAME/KEY: promoter  
27 <222> LOCATION: (1)..(11)  
28 <223> OTHER INFORMATION: Metallothionene AP1 site  
31 <400> SEQUENCE: 1  
32 tgactcagcg c  
35 <210> SEQ ID NO: 2  
36 <211> LENGTH: 13  
37 <212> TYPE: PRT

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11

C--> 38 <213> ORGANISM: Artificial  
40 <220> FEATURE:  
41 <223> OTHER INFORMATION: pBS-GAL4 5' fragment  
43 <220> FEATURE:  
44 <221> NAME/KEY: PEPTIDE  
45 <222> LOCATION: (1)..(13)  
46 <223> OTHER INFORMATION: pBS-GAL4 5' fragment  
49 <400> SEQUENCE: 2  
51 Met Lys Leu Leu Ser Ser Ile Arg Gln Leu Thr Val Ser  
52 1 5 10  
54 <210> SEQ ID NO: 3  
55 <211> LENGTH: 94  
56 <212> TYPE: DNA  
C--> 57 <213> ORGANISM: Artificial  
59 <220> FEATURE:  
60 <223> OTHER INFORMATION: pBS-GAL4 5' fragment  
62 <220> FEATURE:  
63 <221> NAME/KEY: misc\_feature  
64 <222> LOCATION: (1)..(94)  
65 <223> OTHER INFORMATION: pBS-GAL-4 5' fragment

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68 <400> SEQUENCE: 3
69 cgacaccgcg gccaccatga agctactgtc ttctatcgga cagttgactg tatcggtcga      60
71 ctgtcgtgt caactgacat agccagctga cagc                                     94
74 <210> SEQ ID NO: 4
75 <211> LENGTH: 12
76 <212> TYPE: PRT
C--> 77 <213> ORGANISM: Artificial
79 <220> FEATURE:
80 <223> OTHER INFORMATION: pBS-HNF 5' fragment
82 <220> FEATURE:
83 <221> NAME/KEY: PEPTIDE
84 <222> LOCATION: (1)..(12)
85 <223> OTHER INFORMATION: pBS-HNF 5' fragment
88 <400> SEQUENCE: 4
90 Met Val Ser Lys Leu Ser Ala Phe Arg His Lys Leu
91 1      5      10
93 <210> SEQ ID NO: 5
94 <211> LENGTH: 90
95 <212> TYPE: DNA
C--> 96 <213> ORGANISM: Artificial
98 <220> FEATURE:
99 <223> OTHER INFORMATION: pBS-HNF 5' fragment
101 <220> FEATURE:
102 <221> NAME/KEY: misc_feature
103 <222> LOCATION: (1)..(90)
104 <223> OTHER INFORMATION: pBS-HNF 5' fragment
107 <400> SEQUENCE: 5
108 cgacaccgcg gccaccatgg tttctaagct gagcccttcc ggcacaagtt ggtcgactgt      60
110 cggggaaggcc gtgttcaacc agctgacagc                                     90
113 <210> SEQ ID NO: 6
114 <211> LENGTH: 11
115 <212> TYPE: DNA
C--> 116 <213> ORGANISM: Artificial
118 <220> FEATURE:
119 <223> OTHER INFORMATION: generic start site
121 <220> FEATURE:
122 <221> NAME/KEY: misc_feature
123 <222> LOCATION: (1)..(11)
124 <223> OTHER INFORMATION: generic start site
127 <400> SEQUENCE: 6
128 ggccaccatg c                                                         11
131 <210> SEQ ID NO: 7
132 <211> LENGTH: 17
133 <212> TYPE: DNA
C--> 134 <213> ORGANISM: Artificial
136 <220> FEATURE:
137 <223> OTHER INFORMATION: generic start site, complement
139 <220> FEATURE:
140 <221> NAME/KEY: misc_feature

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141 <222> LOCATION: (1)..(17)
142 <223> OTHER INFORMATION: generic start site, complement
145 <400> SEQUENCE: 7
146 cgccggtggt acgagct 17
149 <210> SEQ ID NO: 8
150 <211> LENGTH: 11
151 <212> TYPE: PRT
C--> 152 <213> ORGANISM: Artificial
154 <220> FEATURE:
155 <223> OTHER INFORMATION: generic start site + NLS
157 <220> FEATURE:
158 <221> NAME/KEY: PEPTIDE
159 <222> LOCATION: (1)..(11)
160 <223> OTHER INFORMATION: generic start site + NLS
163 <400> SEQUENCE: 8
165 Leu Asp Pro Lys Lys Lys Arg Lys Val Leu Glu
166 1 5 10
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 27
170 <212> TYPE: DNA
C--> 171 <213> ORGANISM: Artificial
173 <220> FEATURE:
174 <223> OTHER INFORMATION: generic start site + NLS
176 <220> FEATURE:
177 <221> NAME/KEY: misc_feature
178 <222> LOCATION: (1)..(27)
179 <223> OTHER INFORMATION: generic start site + NLS
182 <400> SEQUENCE: 9
183 tcgaccctaa gaagaagaga aaggtac 27
186 <210> SEQ ID NO: 10
187 <211> LENGTH: 27
188 <212> TYPE: DNA
C--> 189 <213> ORGANISM: Artificial
191 <220> FEATURE:
192 <223> OTHER INFORMATION: generic start site + NLS, complement
194 <220> FEATURE:
195 <221> NAME/KEY: misc_feature
196 <222> LOCATION: (1)..(27)
197 <223> OTHER INFORMATION: generic start site + NLS, complement
200 <400> SEQUENCE: 10
201 gggattcttc ttctctttcc atgagct 27
204 <210> SEQ ID NO: 11
205 <211> LENGTH: 6
206 <212> TYPE: PRT
C--> 207 <213> ORGANISM: Artificial
209 <220> FEATURE:
210 <223> OTHER INFORMATION: NF2/3V1E 5' end
212 <220> FEATURE:
213 <221> NAME/KEY: PEPTIDE

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## RAW SEQUENCE LISTING

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```

214 <222> LOCATION: (1)..(6)
215 <223> OTHER INFORMATION: NF2/3V1E 5' end
218 <400> SEQUENCE: 11
220 Ala Pro Pro Thr Asp Val
221 1 5
223 <210> SEQ ID NO: 12
224 <211> LENGTH: 29
225 <212> TYPE: DNA
C--> 226 <213> ORGANISM: Artificial
228 <220> FEATURE:
229 <223> OTHER INFORMATION: NF2/3V1E 5' end
231 <220> FEATURE:
232 <221> NAME/KEY: misc_feature
233 <222> LOCATION: (1)..(29)
234 <223> OTHER INFORMATION: NF2/3V1E 5' end
237 <400> SEQUENCE: 12
238 cgacagtcga cgcccccccg accgatgtc 29
241 <210> SEQ ID NO: 13
242 <211> LENGTH: 5
243 <212> TYPE: PRT
C--> 244 <213> ORGANISM: Artificial
246 <220> FEATURE:
247 <223> OTHER INFORMATION: NF2/3V1E 3' end
249 <220> FEATURE:
250 <221> NAME/KEY: PEPTIDE
251 <222> LOCATION: (1)..(5)
252 <223> OTHER INFORMATION: NF2/3V1E 3' end
255 <400> SEQUENCE: 13
257 Asp Glu Tyr Gly Gly
258 1 5
260 <210> SEQ ID NO: 14
261 <211> LENGTH: 26
262 <212> TYPE: DNA
C--> 263 <213> ORGANISM: Artificial
265 <220> FEATURE:
266 <223> OTHER INFORMATION: NF2/3V1E 3' end
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <222> LOCATION: (1)..(26)
271 <223> OTHER INFORMATION: NF2/3V1E 3' end
274 <400> SEQUENCE: 14
275 gacgagtacg gtgggctcga gtgtcg 26
278 <210> SEQ ID NO: 15
279 <211> LENGTH: 26
280 <212> TYPE: DNA
C--> 281 <213> ORGANISM: Artificial
283 <220> FEATURE:
284 <223> OTHER INFORMATION: NF2/3V1e 3' end, complement
286 <220> FEATURE:

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```

287 <221> NAME/KEY: misc_feature
288 <222> LOCATION: (1)..(26)
289 <223> OTHER INFORMATION: NF2/3V1E 3' end, complement
292 <400> SEQUENCE: 15
293 ctgctcatgc caccgagct cacagc                                26
296 <210> SEQ ID NO: 16
297 <211> LENGTH: 38
298 <212> TYPE: DNA
C--> 299 <213> ORGANISM: Artificial
301 <220> FEATURE:
302 <223> OTHER INFORMATION: oligo 27
304 <220> FEATURE:
305 <221> NAME/KEY: misc_feature
306 <222> LOCATION: (1)..(38)
307 <223> OTHER INFORMATION: oligo 37
310 <400> SEQUENCE: 16
311 cgacaccgcg gccaccatga agctactgtc ttctatcg                38
314 <210> SEQ ID NO: 17
315 <211> LENGTH: 28
316 <212> TYPE: DNA
C--> 317 <213> ORGANISM: Artificial
319 <220> FEATURE:
320 <223> OTHER INFORMATION: oligo 38
322 <220> FEATURE:
323 <221> NAME/KEY: misc_feature
324 <222> LOCATION: (1)..(28)
325 <223> OTHER INFORMATION: oligo 38
328 <400> SEQUENCE: 17
329 cgacagtcca ccgatacagt caactgtc                            28
332 <210> SEQ ID NO: 18
333 <211> LENGTH: 34
334 <212> TYPE: DNA
C--> 335 <213> ORGANISM: Artificial
337 <220> FEATURE:
338 <223> OTHER INFORMATION: oligo 39
340 <220> FEATURE:
341 <221> NAME/KEY: misc_feature
342 <222> LOCATION: (1)..(34)
343 <223> OTHER INFORMATION: oligo 39
346 <400> SEQUENCE: 18
347 cgacaccgcg gccaccatgg tttctaagct gagg                    34
350 <210> SEQ ID NO: 19
351 <211> LENGTH: 28
352 <212> TYPE: DNA
C--> 353 <213> ORGANISM: Artificial
355 <220> FEATURE:
356 <223> OTHER INFORMATION: oligo 40
358 <220> FEATURE:
359 <221> NAME/KEY: misc_feature

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/087,286

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Input Set : A:\PTO.PG.txt  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:24; N Pos. 13  
Seq#:25; N Pos. 19

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,27,28  
Seq#:29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52  
Seq#:53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76  
Seq#:77,78,79